

## Science Toolkit: Grade 4 Objective 2.A.2.b

Student Handout: Science: Grade 4 Objective 2.A.2.b

Standard 2.0 Earth/Space Science

Topic A. Materials and Processes That Shape A Planet

Indicator 2. Recognize and explain how physical weathering and erosion cause changes to the earth's surface.

Objective b. Cite evidence to show that erosion shapes and reshapes the earth's surface as it moves from one location to another.

Water

Ice

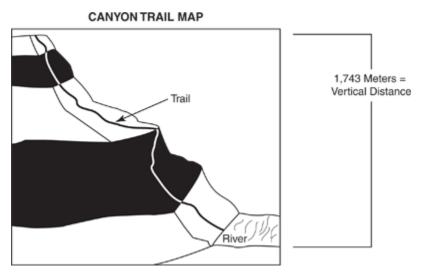
Wind

Selected Response (SR) Item

### Question

Use the information below to answer the following question.

A hiker walks from the upper rim to the bottom of a large canyon. At the bottom of the canyon, the hiker camps for the night. The map below shows the trail the hiker used.



# A large river flows along the bottom of the canyon. The vertical distance between the upper rim of the canyon and the river is 1,743 meters.

What process is most responsible for the depth of the canyon?

- A. One large flood moved the rock layers.
- B. Hot magma melted a path through the rock layers.
- C. Many strong tornadoes eroded the rock layers over time.
- D. Flowing water eroded the rock layers slowly over many years.

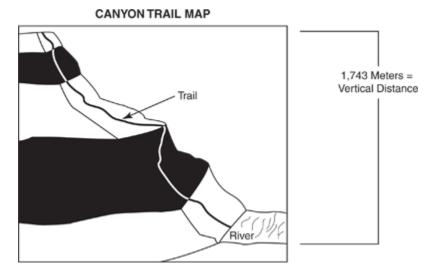
## Correct Answer

D. Flowing water eroded the rock layers slowly over many years.

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